MATH 9 COURSE OUTLINE
FAIRVIEW HIGH SCHOOL
2021-2022

INSTRUCTOR: MISS WYNESS

RESOURCE: MATH LINKS NINE, McGRAW-HILL RHYERSON, 2008

COURSE OBJECTIVE:
The main goals of mathematics education are to prepare students to:
- use mathematics confidently to solve problems
- communicate and reason mathematically
- appreciate and value mathematics
- make connections between mathematics and its applications
- commit themselves to lifelong learning
- become mathematically literate adults, using mathematics to contribute to society.

Students who have met these goals will:
- gain understanding and appreciation of the contributions of mathematics as a science, philosophy and art
- exhibit a positive attitude toward mathematics
- engage and persevere in mathematical tasks and projects
- contribute to mathematical discussions
- take risks in performing mathematical tasks
- exhibit curiosity

GENERAL EXPECTATIONS:
- **REGULAR ATTENDANCE** – After an absence it is YOUR responsibility to catch up on work that you missed. Students must discuss the making up of exams and quizzes with me immediately upon returning to school from an excusable absence.
- **ARRIVE ON TIME** – When you arrive to class, please take your seat and quietly wait for instruction. If lateness is unavoidable, please enter the classroom with a minimum of disruption.
- **COME PREPARED** – Please bring books, pencils, calculators, etc. to class each day. All math is to be done in **pencil**. All handouts, quizzes, assignments, and exams are to be kept in order in a binder. These will assist you as a study guide.
- **ASSIGNMENTS** - Assignments must be turned in in a timely manner. If you need extra time for an assignment please make arrangements with me.
- **WORK HABITS** – Class time will frequently be given to complete assignments. Please stay on task during these times. While I am providing instruction, I expect you to be listening and **NOT** talking. You may of course raise your hand to ask questions or make comments.

COURSE OUTLINE:

*Dates are approximate

UNIT 1:	RATIONAL NUMBERS	September 7 – October 7

- compare and order rational numbers
- perform operations with positive and negative decimals and fractions
- identify and calculate square roots

UNIT 2:	POWERS AND EXPONENTS	October 12 – November 5

- evaluate positive exponents
- apply the exponent laws
- evaluate equations with order of operations and exponent laws

UNIT 3:	OPERATIONS WITH POLYNOMIALS	November 8 – December 10

- identify the variables, degree, number of terms, and coefficients
- simplifying and solve equivalent expressions
- add, subtract, multiply and divide polynomials

UNIT 4:	GEOMETRY OF POLYGONS	January 4 – February 4

- determine surface area of 3D objects
- explain how polygons are similar
- solve problems using similar polygons
- draw and interpret scale diagrams of 2D shapes
- demonstrate an understanding of line and rotation symmetry

UNIT 5:	CIRCLE GEOMETRY	February 7 – March 9

- distinguish between central and inscribed angles
- identify the properties of chords
- identify the properties of tangents

UNIT 6:	LINEAR RELATIONS	March 29 – April 22

- write equations to represent linear relations
- graph linear equations
- solve equations

UNIT 7:	LINEAR INEQUALITIES	April 25 – May 20

- write inequalities to represent real-world problems/situations
- solve one-step inequalities
- solve multi-step inequalities

UNIT 8:   DATA ANALYSIS AND PROBABILITY   May 23 – June 10

- identify the effect of factors such as bias, use of language and ethics on data collection
- justify a selection of population or sample to answer a question
- develop and implement a plan for the collection, analysis, and display of data

REVIEW: June 13 – June 17

FINALS: June 20 – June 24

EVALUATION:

45%   Assignments/Quizzes

30%   Unit Exams

25%   Final Examination

Keep track of your marks as they will be posted online regularly. Our online marks system is used as a tool for teachers to communicate with students and parents about such things as attendance, marks, discipline, schedules, assignments, events, fees and graduation requirements.